



gas | electric | steam | telecom

Commissioners:
Francis J. Hoey, III
Robert H. Griffin
Raymond H. Feyre

Manager:
James M. Lavelle

February 9, 2009

Philip Giudice, Commissioner
Massachusetts Department of Energy Resources (DOER)
100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: Request for Comments on 225 CMR 14.00 and 225 CMR 15.00

Dear Commissioner Giudice:

The City of Holyoke Gas & Electric Department (HG&E) thanks the DOER for the opportunity to submit comments to the emergency regulations issued December 31, 2008 regarding the provisions of Section 32 of the Green Communities Act (Act). HG&E shall provide comments on the renewable portfolio standard (RPS) Class I and RPS Class II regulations.

HG&E Background

HG&E is a municipal gas and electric utility that operates several hydroelectric facilities in western Massachusetts, including an elaborate four and half mile network of canals that provide cascading head and flow to a series of smaller hydroelectric stations. On average, 73% of HG&E's retail sales are currently met from this carbon-free, renewable resource. Further, roughly 15% of HG&E's total electrical load is derived from energy generated from existing hydroelectric facilities up to 5 megawatts that meet the Class II RPS criteria ("Small Hydro").

HG&E RPS Class I Background Info

HG&E has identified six potential new/incremental hydro projects within our FERC licensed areas that could add an additional net 21.5 MW of capacity. This amount assumes 30 MW of new larger, efficient hydro with some 8.5 MW of smaller, inefficient hydro retired from service. HG&E can be an integral part in helping the Commonwealth attain its goal of 15% of energy supply being derived from renewable resources by 2020. However, since these projects cost on average about \$4,200/kW installed, it is necessary that these projects obtain Class I renewable certificates for entire output over a reasonable financing period with as much certainty as to no significant market and/or compliance changes after such certification is provided.

HG&E RPS Class II Background Info

As one of the largest owners of existing small hydro facilities (15 facilities with 30 generating units), HG&E feels that a viable and active Class II RPS program must remain in place for these vintage units to survive with sufficient revenues to offset their high capital, operation, and maintenance costs. Additionally, there needs to be some flexibility in the final rules to allow a hydro owner to make major upgrades to an existing facility that would allow the entire facility (or pro rata portion of a unit versus total facility) to be re-classified as Class I RPS. Without this provision, either the small, inefficient hydro units will continue to be run with Class II support or the unit would be retired, abandoned, or decommissioned. With this provision, smaller inefficient hydro units could be completely overhauled allowing for not only continued renewable output at such site but also for usually significantly greater output for the same amount of water.

LIHI Process for Certification Compliance

HG&E believes that hydro should exist in RPS without any i) size limitation, ii) further environmental regulatory conditions, and iii) non-governmental, non-accountable third party review process. With this stated, if Low Impact Hydropower Institute (LIHI) certification becomes the primary compliance criteria, then HG&E offers following comments:

- Since the Act references River Flows, Water Quality, Fish Passage and Protection, and Watershed Protection provisions only as additional site specific criteria placed on hydro facilities, then only the first 4 standards of LIHI should apply. Standards 5 through 8 of LIHI include Threatened and Endangered Species Protection, Cultural Resource Protection, Recreation, and Facilities Recommended for Removal which since not listed in the Act should not be included as additional compliance requirements. Using LIHI is extra-legal as the DOER is exceeding its statutory mandate and its regulatory discretion beyond the clear wording of the Act.
See <http://www.lowimpacthydro.org/UserFiles/File/summary%20criteria%2011-08%20pdf.doc>
- Since LIHI does not have jurisdiction of facilities outside the United States, similar guidelines need to be put in place to ensure that any hydro facility imports from Canada into MA RPS markets meet the same stringent criteria that hydro facilities in MA must adhere to (including the use of independent third parties as contemplated in the regulations). Further, "LIHI does not certify dams outside of the United States, although we may in the future modify the program to address hydropower projects in Canada".
See <http://www.lowimpacthydro.org/documents/faq.pdf>
- Although Relevant Hydroelectric Agency is a defined term in the regulations, a list of all such agencies needs to be provided as soon as practical to ensure that time is not lost for those hydro facilities who wish to begin such LIHI process (which requires serving notice to all RHA).
- Since LIHI is a non-governmental organization and is further not a contractor to a government agency, HG&E has concerns that they do not have to open their decision-making

- to public scrutiny and therefore could change their procedural or substantive review process at will. If a hydro facility obtains financing after receiving LIHI certification and then starts receiving RPS Class I or II certificates, then this hydro facility must be grandfathered for at least a twenty year period to remove risk that LIHI could take away such certification at anytime in future for any reason (i.e., changed requirements, new requested remedies, etc). Hydro owners need certainty and consistency in process, especially since capital costs of a new hydro facility are on the magnitude of 3 to 5 times the cost of a new fossil plant so renewable certificates are needed by hydro owners to meet cash flow and debt requirements.
- The emergency regulations require that LIHI certify the request and further adopt a “remedy” as proposed by a relevant agency. Acknowledging that an agency may offer ideas in the LIHI process is one thing, but to essentially require LIHI to negotiate a “remedy” between the agency and applicant is very different. Better that the rule require an acknowledgement that LIHI addressed or didn’t address a comment/suggestion by an agency, leaving the final qualification decision to DOER after further comment by both the agency and the applicant.

How calculate incremental hydro?

For purposes of assigning incremental energy output eligible for RPS Class I, a clear understanding of how or under what methodologies such calculation will be allowed is necessary. If based on historical, how and what process? Since a municipal utility is tax exempt, the FERC’s “Renewable Energy Production Tax Credit: Instructions for Requesting Certification of Incremental Hydropower Production Pursuant to the Energy Policy Act of 2005” do not apply. Since significant verifiable hourly historical hydrologic gage information is available, HG&E would still be able to compile data showing impact to historical, current, and future output based on any new/modified projects. Rules just need to be flexible.

Hydrokinetic and Hydroelectric are Separate and Can Be at Same Facility

Current emergency rules for hydroelectric state that “The Unit does not generate Marine or Hydrokinetic Energy”. This is confusing and it is believed unintended. Instead, DOER should make clear that these are separate, distinct resource types and that any hydrokinetic resource on-site of a conventional hydroelectric resource shall not impact the current up to 25 MW and up to 5 MW languages in rules for new/incremental and existing hydro respectively. HG&E has current plans to perform a pilot project of a hydrokinetic resource in one of our tailraces and as our conventional hydro unit is just ahead of the tailrace, no prohibition on getting RPS Class I or II should occur.

When can re-powered existing facility become Class I?

HG&E’s fifteen Small Hydro facilities are very representative of the types of small vintage hydroelectric generation units that are located within the Commonwealth. The average age of these units are around 80 years old, with civil structures over a century in age, and many are at their end of their useful life. The use of RPS Class II certificates will help keep these units in continued operating condition only until such time as there is a major capital requirement, in which case supporting revenues including RPS Class II more than likely would not be sufficient. DOER

needs to establish guidelines as to when an existing resource can be repowered to become Class I eligible. This could be through either site-specific demonstration of project or by setting certain parameters.

The parameters listed under 225 CMR 14.05(7)(c) with regards to Replacement Generation Unit are helpful and should be preserved in final rules. A modification should occur to 225 CMR 14.05(7)(c)2 to allow for an exemption of the five years out of service per review with DOER and applicant (and possibly RHA, LIHI) with regards to hydroelectric facilities that will be repowered/replaced. Such exemption should take into account any increased efficiency and output of the replacement facility versus the existing facility. A hydroelectric unit is not necessarily mothballed or decommissioned prior to requiring replacement. In fact, many of them are continued to be band-aided as long as possible until major components fail. These locations even prior to being taken off-line no longer receive major capital improvements since market revenues currently do not support such costs. Without a five year waiting period for hydroelectric resources, major improvements could be made faster allowing incremental renewable output on faster and lengthen the life of this valuable carbon-free resource.

Thank you again for the opportunity to provide these comments. Should you have any questions, please do not hesitate to contact me at (413) 536-9352.

Sincerely,



Brian C. Beauregard
Superintendent